

CLAIMS

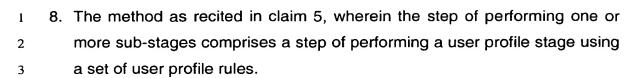
What is claimed is:

- 1. A content transformation method operated in a client-server communication
 system, the method comprising steps of:
- receiving a content request by a server from a client;
- performing a first stage content transformation to generate a first stage data layout based upon said content request;
- performing a intermediate stage content transformation using said first stage data layout to generate a intermediate data layout; and
- performing a final stage content transformation using said intermediate data layout to generate a presentation format based on a device used by said client.
- 2. The method as recited in claim 1, wherein the step of performing said a first stage content transformation comprises the step of retrieving data from a database.
- 3. The method as recited in claim 2, wherein the step of performing a first stage content transformation further comprises the step of defining a set of first stage rules.
- 4. The method as recited in claim 3, wherein the step of performing a first stage content transformation further comprises step of generating said first stage data layout by transforming said data using said first stage rules.
- 5. The method as recited in claim 2, the step of performing an intermediate stage content transformation comprises step of performing one or more sub-stages to generate said intermediate stage data layout.
- 6. The method as recited in claim 5, wherein the step of performing one or more sub-stages comprises a step of performing a browser-type stage using a set of browser-type rules.
- 7. The method as recited in claim 5, wherein the step of performing one or more sub-stages comprises a step of performing an internationalization stage using a set of internationalization rules.

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- 9. The method as recited in claim 5, wherein the step of performing one or more sub-stages comprises a step of performing an optimization stage using a set of optimization rules.
- 1 10. The method as recited in claim 1, wherein the step of performing a final stage content transformation comprises a step of defining a set of final stage rules.
- 1 11. The method as recited in claim 10, wherein the step of defining a set of 2 final stage rules comprises a step of using said content request to define 3 the final stage rules.
- 1 12. The method as recited in claim 1, wherein the content transformation is 2 XSLT based content transformation using XSLT engine.
- 13. A server in a client-server communication system, the server comprising;
- a content transformation operating program wherein the operating program comprising the steps of:
- 4 receiving a content request by a server from a client;
- 5 performing a first stage content transformation to generate a first 6 stage data layout based upon said content request;
- performing a intermediate stage content transformation using said first stage data layout to generate a intermediate data layout; and
- performing a final stage content transformation using said intermediate data layout to generate a presentation format based on a device used by said client.
 - 14. The server according to claim 13, wherein the step of performing a first stage content transformation, further comprises the step of retrieving data from a database.



- 1 15. The server according to claim 14, wherein the step of performing a first 2 stage content transformation, further comprises the step of defining a set 3 of first stage rules.
- 1 16. The server according to claim 15, wherein the step of performing a first 2 stage content transformation further comprises step of generating said first 3 stage data layout by transforming said data using said first stage rules.
- 17. The server according to claim 13, the step of performing an intermediate stage content transformation comprises step of performing one or more sub-stages to generate said intermediate stage data layout.
- 1 18. The server according to claim 17, wherein the step of performing one or 2 more sub-stages comprises a step of performing a browser-type stage 3 using a set of browser-type rules.
- 1 19. The server according to claim 17, wherein the step of performing one or 2 more sub-stages comprises a step of performing an internationalization 3 stage using a set of internationalization rules.
- 20. The server according to claim 17, wherein the step of performing one or more sub-stages comprises a step of performing a user profile stage using a set of user profile rules.
- 21. The server according to claim 17, wherein the step of performing one or more sub-stages comprises a step of performing an optimization stage using a set of optimization rules.
- 22. The server according to claim 13, wherein the step of performing a final stage content transformation comprises a step of defining a set of final stage rules.
- 23. The server according to claim 22, wherein the step of defining a set of final stage rules comprises a step of using said content request to define the final stage rules.